# **PATENTS**

# IN THE UNITED STATES PATENT AND TRADMARK OFFICE

opplicants: Liu, et al.

Serial No.: 10/797,734

Tiled: March 10, 2004

Title: ISOXAZOLE CARBOXAMIDE DERIVATIVES AS GHRELIN RECEPTOR

**MODULATORS** 

1

Case No.: 7049US02

Group Art No.: 1614

Examiner: (not yet assigned)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as

first class mail in an envelope addressed to the:

Mail Stop Missing Parts Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450 on:

Date of Deposit: June 17, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### TRANSMITTAL LETTER

Dear Sir:

Enclosed herewith for the patent application identified above entitled: ISOXAZOLE CARBOXAMIDE DERIVATIVES AS GHRELIN RECEPTOR MODULATORS are the following:

- 1. Information Disclosure Statement;
- 2. Form PTO 1449, in duplicate;
- References as cited on PTO 1449 (13 references); and 3.
- Return Receipt Postcard.

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR §1.16, as well as any patent application processing fees under 37 CFR §1.17 associated with this communication for which full payment had not been tendered, to Deposit Account No. 01-0025.

> Respectfully submitted, Liu, et al.

ABBOTT LABORATORIES Customer Number 23492

Telephone: (847) 935-7956 Facsimile: (847) 938-2623

Johanna M. Corbin

Registration No. 51,582

Attorney for Applicants

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Tanya Parent

Date

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed, to the knowledge of the undersigned, before the mailing date of a first Office Action on the merits. Applicants respectfully petition and request that the Examiner consider the listed documents and evidence such consideration by making appropriate notations on the attached form. Copies of the listed documents are attached.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

The Commissioner is authorized to charge our Deposit Account any additional fees (or credit any over payments) that may be required under 37 C.F.R. §§ 1.16 and 1.17 in association with this communication for which full payment has not been tendered.

Respectfully submitted, Liu, et al.

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Johanna M. Corbin Registration No. 51,582

Attorney for Applicants

DATE:

June 17, 2004

SHEET 1 of 1

# Form PTO - 1449 (Modified)

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 7049US02	SERIAL NO. 10/797,734	
UN 2 1 2004 월	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Gang Liu, et al.		
(57 CAR 1.98 (b))		FILING DATE March 10, 2004	GROUP 1614	

## **U.S.PATENT DOCUMENTS**

EXAMINER INITIAL	ı	PAT	EN'	ΤN	UM	BER	ISSUE DATE	PATENTE	E	CLASS	SUB CLASS	FILING DATE

# FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

	DO	OCL	JME	ENT	NU	MBI	ER	PUBLI- CATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUB CLASS	TRA LAT YES	INS- ION NO

# OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

Cl	Asakawa, A., et al., "Ghrelin is an appetite-stimulatory signal from stomach with structural resemblance to motilin",
	Gastroenterology, 120(2):337-345 (2001)
C2	Cummings, D. E., et al., "Plasma Ghrelin Levels after Diet-Induced Weight Loss or Gastric Bypass Surgery", The New England Journal of Medicine, 346(21):1623-1630 (2002)
C3	Frohman, L. & Jansson, J-O, "Growth Hormone-Releasing Hormone*, Encodrine Reviews, 7(3):223-253 (1986)
C4	Howard, A. D., et al., "A Receptor in Pituitary and Hypothalamus That Functions in Growth Hormone Release", Science, 273:974-977 (1996)
C5	Kamegai, J., et al., "Central Effect of Ghrelin, an Endogenous Growth Hormone Secretagogue, on Hypothalamic Peptide Gene Expression", Endocrinology, 141(12):4797-4800 (2000)
C6	Kojima, M., et al., "Ghrelin is a growth-hormone-releaseing acylated peptide from stomach", letters to nature, 402:656-660 (1999)
C7	Momany, F. A., et al., "Design, Synthesis, and Biological Activity of Peptides which Release Growth Hormone in Vitro*", Endocrinology, 108(1):31-39 (1981)
C8	Murakami, N., et al., "Role for central ghrelin in food intake and secretion profile of stomach ghrelin in rats", Journ of Endocrinology, 174:283-288 (2002)
C9	Nakazato, M., et al., "A role for ghrelin in the central regulation of feeding", Nature, 409:194-198 (2001)
C10	Shintani, M., et al., "Ghrelin, an Endogenous Growth Hormone Secretagogue, Is a Novel Orexigenic Peptide That Antagonizes Leptin Action Through the Activation of Hypothalamic Neuropeptide Y/Y1 Receptor Pathway", diabetes, 50(2):227-232 (2001)
C11	Shuto, Y.,. et al., "Hypothalamic growth hormone secretagogue receptor regulates growth hormone secretion, feeding, and adiposity", The Journ. of Clin. Invest., 109(11):1429-1436 (2002)
C12	Smith et al., "Solid and Solution Phase organic syntheses of oligomeric thioureas," J. Org. Chem. 61:8811-8818 (1996)
C13	Svensson, J., et al., "Two-Month Treatment of Obese Subjects with the Oral Growth Hormone (GH) Secretagogue MK-677 Increases GH Secretion, Fat-Free Mass, and Energy Expenditure", The Hourn of Clin. Endocr. & Metabol.", 83(2):362-369 (1998)
FYAMINER	DATE CONSIDERED

EXAMINER DATE CONSIDEREI

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicat.

DATE:

June 17, 2004

SHEET \_1\_ of \_1\_

# Form PTO - 1449 (Modified)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.	SERIAL NO.	
TPE	7049US02	10/797,734	
INFORMATION DISCLOSURE	APPLICANT		
JUN 2 1 2004 STATEMENT BY APPLICANT	Gang Liu, et al.		
	FILING DATE	GROUP	
(Use several sheets if necessary)	March 10, 2004	1614	

## **U.S.PATENT DOCUMENTS**

EXAMINER INITIAL		РАТ	ΈΝ΄	ΓN	UM	BER	ISSUE DATE	PATENTEE	CLASS	SUB CLASS	FILING DATE
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								DATE	PATENT OFFICE	CLASS	CLASS	YES	NO

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	C1	Asakawa, A., et al., "Ghrelin is an appetite-stimulatory signal from stomach with structural resemblance to motilin", Gastroenterology, 120(2):337-345 (2001)
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